

PCT COOPERATION TREATY

PCT

NOTIFICATION OF ELECTION

(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

Commissioner
 US Department of Commerce
 United States Patent and Trademark
 Office, PCT
 2011 South Clark Place Room
 CP2/5C24
 Arlington, VA 22202
 ETATS-UNIS D'AMERIQUE
 in its capacity as elected Office

Date of mailing (day/month/year) 09 November 2001 (09.11.01)	Applicant's or agent's file reference PF-0727 PCT
International application No. PCT/US00/21878	Priority date (day/month/year) 09 August 1999 (09.08.99)
International filing date (day/month/year) 09 August 2000 (09.08.00)	
Applicant YUE, Henry et al	

1. The designated Office is hereby notified of its election made:

☒ in the demand filed with the International Preliminary Examining Authority on:
 08 March 2001 (08.03.01)

☐ in a notice effecting later election filed with the International Bureau on:

2. The election ☒ was
☐ was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No.: (41-22) 740.14.35	Authorized officer Antonia MULLER Telephone No.: (41-22) 338.83.38
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PATENT COOPERATION TREATY

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NOTIFICATION OF ELECTION

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Commissioner
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 Arlington, VA 22202
 ETATS-UNIS D'AMERIQUE

in its capacity as elected Office

Date of mailing (day/month/year)

09 October 2001 (09.10.01)

International application No.

PCT/US00/21878

Applicant's or agent's file reference

PF-0727 PCT

International filing date (day/month/year)

09 August 2000 (09.08.00)

Priority date (day/month/year)

09 August 1999 (09.08.99)

Applicant

YUE, Henry et al

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2. The election ☒ was

was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

The International Bureau of WIPO
 34, chemin des Colombettes
 1211 Geneva 20, Switzerland

Facsimile No.: (41-22) 740.14.35

Authorized officer

Dorothee MÜLHAUSEN

Telephone No.: (41-22) 338.83.38

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference PF-0727 PCT	FOR FURTHER ACTION see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. PCT/US 00/ 21878	International filing date (day/month/year) 09/08/2000	(Earliest) Priority Date (day/month/year) 09/08/1999
Applicant INCYTE GENOMICS, INC. et al.		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 8 sheets.

☐ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :

☒ contained in the international application in written form.

☒ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☒ **Certain claims were found unsearchable** (See Box I).

3. ☒ **Unity of invention is lacking** (see Box II).

4. With regard to the **title**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No.

☐ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

☐ None of the figures.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 00/21878

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C12N15/57 C12N15/15 C12N9/64 C07K14/81 C12N15/63
 C12N5/10 A61K38/48 A61K38/57 A01K67/027

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C07K C12N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	HILLIER ET AL.: "WashU-NCI human EST Project" EMBL SEQUENCE DATABASE, 22 December 1997 (1997-12-22), XP002157648 ✓ HEIDELBERG DE Ac AA700364 the whole document	1,3,12
X	NCI-CGAP: "National cancer institute, Cancer genome anatomy project" EMBL SEQUENCE DATABASE, 13 June 1998 (1998-06-13), XP002157649 ✓ HEIDELBERG DE Ac AI052207 the whole document --- -/-	1,3,12

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

° Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

17 January 2001

Date of mailing of the international search report

20 APR. 2001

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
 NL - 2280 HV Rijswijk
 Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
 Fax: (+31-70) 340-3016

Authorized officer

CEDER O.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 00/21878

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 97 14797 A (DANA FARBER CANCER INST INC) 24 April 1997 (1997-04-24) abstract; claims ✓ ---	1-19,22, 25-28
A	EP 0 736 302 A (STICHTING REGA V Z W) 9 October 1996 (1996-10-09) ✓ ---	
P,X	HAN X ET AL: "The protein Z-dependent protease inhibitor is a serpin" BIOCHEMISTRY, AMERICAN CHEMICAL SOCIETY. EASTON, PA, US, vol. 38, 24 August 1999 (1999-08-24), pages 11073-11078, XP002127083 ISSN: 0006-2960 the whole document ---	1-9, 11-14
P,X	WO 99 60126 A (BROZE GEORGE J JR ;UNIV WASHINGTON (US)) 25 November 1999 (1999-11-25) ✓ abstract; figure 6 -----	1-9,11, 12,16-18

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 00/21878

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
WO 9714797	A	24-04-1997	AU	7457996 A	07-05-1997
EP 0736302	A	09-10-1996	EP	0733369 A	25-09-1996
WO 9960126	A	25-11-1999	AU	3860299 A	06-12-1999
			EP	1078061 A	28-02-2001

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US 00/21878

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
see FURTHER INFORMATION sheet PCT/ISA/210
2. ☒ Claims Nos.: 20,21,23,24
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
see FURTHER INFORMATION sheet PCT/ISA/210
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-28 partially

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

From the
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

To:
DIANA HAMLET-COX
INCYTE GENOMICS, INC.
3160 PORTER DRIVE
PALO ALTO, CA 94304

PCT

NOTIFICATION OF TRANSMITTAL OF
INTERNATIONAL PRELIMINARY
EXAMINATION REPORT

(PCT Rule 71.1)

Date of Mailing
(day/month/year)

26 MAR 2002

Applicant's or agent's file reference

PF-0727 PCT

IMPORTANT NOTIFICATION

International application No.

International filing date (day/month/year)

Priority date (day/month/year)

PCT/US00/21878

09 August 2000 (09.08.2000)

09 August 1999 (09.08.1999)

Applicant

INCYTE GENOMICS, INC.

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary examination report and its annexes, if any, established on the international application.
2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.
4. **REMINDER**

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices)(Article 39(1))(see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

Name and mailing address of the IPEA/US
Commissioner of Patents and Trademarks
Box PCT
Washington, D.C. 20231

Facsimile No. (703)305-3230

Authorized officer

Gabriele E. BUGAISKY

Telephone No. 708 308-0196

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference PF-0727 PCT		FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/US00/21878	International filing date (day/month/year) 09 August 2000 (09.08.2000)	Priority date (day/month/year) 09 August 1999 (09.08.1999)	
International Patent Classification (IPC) or national classification and IPC IPC(7): C12N 15/57, 15/15, 9/64, 15/63, 5/10; A 61K 38/48, 38/57; A01K 67/027 and US Cl.: 435/69.2, 320.1, 325, 252.3, 254.1; 530/350, 387.9; 512/12; 536.23.5; 800/8			
Applicant INCYTE GENOMICS, INC.			
<p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>4</u> sheets, including this cover sheet.</p> <p><input type="checkbox"/> This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of <u>0</u> sheets.</p> <p>3. This report contains indications relating to the following items:</p> <p>I <input checked="" type="checkbox"/> Basis of the report</p> <p>II <input type="checkbox"/> Priority</p> <p>III <input checked="" type="checkbox"/> Non-establishment of report with regard to novelty, inventive step and industrial applicability</p> <p>IV <input type="checkbox"/> Lack of unity of invention</p> <p>V <input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p>VI <input type="checkbox"/> Certain documents cited</p> <p>VII <input type="checkbox"/> Certain defects in the international application</p> <p>VIII <input type="checkbox"/> Certain observations on the international application</p>			
Date of submission of the demand 08 March 2001 (08.03.2001)		Date of completion of this report 08 March 2002 (08.03.2002)	
Name and mailing address of the IPEA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 Facsimile No. (703)305-3230		Authorized officer <i>Gabe Bugaisky</i> Gabriele E. BUGAISKY Telephone No. 708 308-0196	

I. Basis of the report**1. With regard to the elements of the international application:***

- ☒ the international application as originally filed.
- ☒ the description:
pages 1-84 as originally filed
pages NONE filed with the demand
pages NONE filed with the letter of _____.
- ☒ the claims:
pages 85-89 as originally filed
pages NONE as amended (together with any statement) under Article 19
pages NONE filed with the demand
pages NONE filed with the letter of _____.
- ☒ the drawings:
pages none as originally filed
pages NONE filed with the demand
pages NONE filed with the letter of _____.
- ☒ the sequence listing part of the description:
pages 1-44 as originally filed
pages NONE filed with the demand
pages NONE filed with the letter of _____.

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language _____ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☒ contained in the international application in printed form.
- ☒ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☒ The amendments have resulted in the cancellation of:

- ☒ the description, pages none
- ☒ the claims, Nos. none
- ☒ the drawings, sheets/fig none

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

III. Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

1. The question whether the claimed invention appears to be novel, to involve an inventive step (to be non-obvious), or to be industrially applicable have not been and will not be examined in respect of:

- ☐ the entire international application,
☒ claims Nos. Claims 1-19, 22, 25-28 in part (examined only for SEQ ID NO:1 and 28), 20-21, 23-24

because:

- ☐ the said international application, or the said claim Nos. _____ relate to the following subject matter which does not require international preliminary examination (*specify*):

- ☐ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. _____ are so unclear that no meaningful opinion could be formed (*specify*):

- ☐ the claims, or said claims Nos. _____ are so inadequately supported by the description that no meaningful opinion could be formed.

- ☒ no international search report has been established for said claims Nos. 20-21 and 23-24

2. A meaningful international preliminary examination cannot be carried out due to the failure of the nucleotide and/or amino acid sequence listing to comply with the standard provided for in Annex C of the Administrative Instructions:

- ☐ the written form has not been furnished or does not comply with the standard.
☐ the computer readable form has not been furnished or does not comply with the standard.

V. Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**1. STATEMENT**

Novelty (N)	Claims <u>1-11, 13-19, 22 25-28</u>	YES
	Claims <u>12</u>	NO
Inventive Step (IS)	Claims <u>1-11, 13-19, 22, 25-28</u>	YES
	Claims <u>12</u>	NO
Industrial Applicability (IA)	Claims <u>1-19, 22, 25-28</u>	YES
	Claims <u>NONE</u>	NO

2. CITATIONS AND EXPLANATIONS

Claims 1-19, 22 and 25-28 were examined only for the subject material that was searched in Chapter I-SEQ ID NOs: 1 and 28.

Claim 12 lacks novelty under PCT Article 33(2) as being anticipated by HILLIER et al. or NCI-CGAP. Each reference provides an EST sequence which shares more than 60 nucleotides in common with SEQ ID NO:28.

Claims 1-11, 13-19, 22 and 25-28 meet the criteria set out in PCT Article 33(2)-(4), because the prior art does not teach or fairly suggest the polypeptide of SEQ ID NO:1 nor the polymucleotide of SEQ ID NO:28. Because these are novel, compositions comprising these compounds and methods of use of these compounds are also novel.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box I.1

Although claim 18 is directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.

Rule 39.1(iv) PCT - Method for treatment of the human or animal body by therapy

Continuation of Box I.2

Claims Nos.: 20,21,23,24

Claims 20,21,23 and 24 refers to agonists/antagonists of the polypeptide of claim 1 and their use in a method for treating a disease without giving a true technical characterization of the agonists/antagonists. Moreover, no such compounds are specifically defined in the description. It is only indicated that they "may include proteins" (such as antibodies)", nucleic acids, carbohydrates, small molecules, or any other compound or composition which modulates the activity of PPIM either by directly interacting with PPIM or by acting on components of the biological pathway in which PPIM participates." (page 9 lines 32-34; page 10 lines 32-35). In consequence the scope of said claims is ambiguous and vague, and their subject-matter is not sufficiently disclosed and supported (Art. 5 and 6 PCT). No search can be carried out for such claims whose wording is, in fact, a mere recitation of the results to be achieved.

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. Claims: 1-28 partially

Polypeptide comprising SEQ ID NO 1 and variants thereof; polynucleotide (SEQ ID NO 28) encoding the same and variants thereof; expression vector, host cell and transgenic organism comprising the same; use thereof for producing the polypeptide; antibody against the polypeptide; agonist and antagonist of the polypeptide; methods and pharmaceutical compositions using them.

2. Claims: 1-28 partially

Subject matter as defined for invention 1 above, but limited to SEQ ID NOS 2 and 29.

3. Claims: 1-28 partially

Subject matter as defined for invention 1 above, but limited to SEQ ID NOS 3 and 30.

4. Claims: 1-28 partially

Subject matter as defined for invention 1 above, but limited to SEQ ID NOS 4 and 31.

5. Claims: 1-28 partially

Subject matter as defined for invention 1 above, but limited to SEQ ID NOS 5 and 32.

6. Claims: 1-28 partially

Subject matter as defined for invention 1 above, but limited to SEQ ID NOS 6 and 33.

7. Claims: 1-28 partially

Subject matter as defined for invention 1 above, but limited to SEQ ID NOS 7 and 34.

8. Claims: 1-28 partially

Subject matter as defined for invention 1 above, but limited to SEQ ID NOS 8 and 35.

9. Claims: 1-28 partially

Subject matter as defined for invention 1 above, but limited to SEQ ID NOS 9 and 36.

10. Claims: 1-28 partially

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Subject matter as defined for invention 1 above, but limited to SEQ ID NOS 10 and 37.

11. Claims: 1-28 partially

Subject matter as defined for invention 1 above, but limited to SEQ ID NOS 11 and 38.

12. Claims: 1-28 partially

Subject matter as defined for invention 1 above, but limited to SEQ ID NOS 12 and 39.

13. Claims: 1-28 partially

Subject matter as defined for invention 1 above, but limited to SEQ ID NOS 14 and 41.

14. Claims: 1-28 partially

Subject matter as defined for invention 1 above, but limited to SEQ ID NOS 15 and 42.

15. Claims: 1-28 partially

Subject matter as defined for invention 1 above, but limited to SEQ ID NOS 16 and 43.

16. Claims: 1-28 partially

Subject matter as defined for invention 1 above, but limited to SEQ ID NOS 17 and 44.

17. Claims: 1-28 partially

Subject matter as defined for invention 1 above, but limited to SEQ ID NOS 18 and 45.

18. Claims: 1-28 partially

Subject matter as defined for invention 1 above, but limited to SEQ ID NOS 19 and 46.

19. Claims: 1-28 partially

Subject matter as defined for invention 1 above, but limited to SEQ ID NOS 20 and 47.

20. Claims: 1-28 partially

Subject matter as defined for invention 1 above, but limited to SEQ ID NOS 21 and 48.

21. Claims: 1-28 partially

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Subject matter as defined for invention 1 above, but limited to SEQ ID NOS 22 and 49.

22. Claims: 1-28 partially

Subject matter as defined for invention 1 above, but limited to SEQ ID NOS 23 and 50.

23. Claims: 1-28 partially

Subject matter as defined for invention 1 above, but limited to SEQ ID NOS 24 and 51.

24. Claims: 1-28 partially

Subject matter as defined for invention 1 above, but limited to SEQ ID NOS 25 and 52.

25. Claims: 1-28 partially

Subject matter as defined for invention 1 above, but limited to SEQ ID NOS 26 and 53.

26. Claims: 1-28 partially

Subject matter as defined for invention 1 above, but limited to SEQ ID NOS 27 and 54.

For the sake of conciseness, the first subject matter is explicitly defined, the other subject matters are defined by analogy thereto.

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
15 February 2001 (15.02.2001)

PCT

(10) International Publication Number
WO 01/10903 A2

(51) International Patent Classification⁷: C07K 14/00

(21) International Application Number: PCT/US00/21878

(22) International Filing Date: 9 August 2000 (09.08.2000)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/147,986 9 August 1999 (09.08.1999) US
60/160,807 21 October 1999 (21.10.1999) US

(63) Related by continuation (CON) or continuation-in-part (CIP) to earlier applications:
US 60/147,986 (CIP)
Filed on 9 August 1999 (09.08.1999)
US 60/160,807 (CIP)
Filed on 21 October 1999 (21.10.1999)

(71) Applicant (for all designated States except US): INCYTE GENOMICS, INC. [US/US]; 3160 Porter Drive, Palo Alto, CA 94304 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): YUE, Henry [US/US]; 826 Lois Avenue, Sunnyvale, CA 94087 (US). LAL, Preeti [IN/US]; 2382 Lass Drive, Santa Clara, CA 95054 (US). TANG, Y., Tom [CN/US]; 4230 Ranwick Court, San Jose, CA 95118 (US). BANDMAN, Olga [US/US]; 366 Anna Avenue, Mountain View, CA 94043

(US). BAUGHN, Mariah, R. [US/US]; 14244 Santiago Road, San Leandro, CA 94577 (US). AZIMZAI, Yalda [US/US]; 2045 Rock Springs Drive, Hayward, CA 94545 (US). LU, Dyung, Aina, M. [US/US]; 55 Park Belmont Place, San Jose, CA 95136 (US). YANG, Junming [CN/US]; 7125 Bark Lane, San Jose, CA 95129 (US).

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(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

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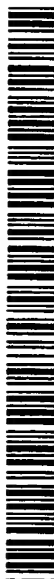
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(54) Title: PROTEASES AND PROTEASE INHIBITORS

(57) Abstract: The invention provides human proteases and protease inhibitors (PPIM) and polynucleotides which identify and encode PPIM. The invention also provides expression vectors, host cells, antibodies, agonists, and antagonists. The invention also provides methods for diagnosing, treating, or preventing disorders associated with expression of PPIM.

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